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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,640	08/15/2001	Andre M. E. Nel	10001090-1	1838

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EXAMINER

STERRETT, JONATHAN G

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,640

Applicant(s)

NEL, ANDRE M. E.

Examiner

Jonathan G. Sterrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 8-15-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-15-01.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Summary

1. **Claims 1-20** are pending in the application.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of **50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it is too long at approximately **230 words**. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 1-9** are rejected under 35 U.S.C. 101 because the invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts: and

(2) whether the invention produces a useful, concrete and tangible result.

6. For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case, none of **Claims 1-9** are directed to anything in the technological arts as explained above. Specifically for **Claim 1** the limitation “**computing a projection of available carrier capacity**” is cited. This limitation can be performed without utilizing technological elements. Further in **Claim 1**, the limitation “**identifying one or more freight haulage job candidates**” is cited. This limitation can be performed manually without utilizing technological elements. Looking at the claims as a whole, nothing in the body of the claims recites any structure or functionality to suggest that a computer or any technology performs the recited steps. Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention provides a method of allocating freight haulage jobs, which is a useful, concrete and tangible result. Although the recited process produces a useful, concrete and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, **Claims 1-9** are deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-6, 10-14, 16 and 17** are rejected under 35 U.S.C. 102(e) as being anticipated by **Gaspard, II US 2002/0055818** (hereinafter **Gaspard**).

Regarding **Claim 1**, Gaspard discloses:

receiving capacity attributes, including position information, route information and excess capacity information, for each of a set of mobile carrier entities;

Paragraph 38 line 2-4, GPS data transmitted from vehicle (i.e. position information) is received by the host computer.

Paragraph 42 line 1-4, route information is retrieved (i.e. received) from database of available vehicles and the routes where they are located.

Paragraph 60 line 2-4, freight requirements for a freight transport request (i.e. excess capacity information) are received from the database to determine if a freight transport request can be fulfilled and how it can be fulfilled. Gaspard's invention fulfills freight transport requests for a set of mobile entities –see paragraph 42 line 4)

computing a projection of available carrier capacity based upon the received mobile carrier capacity attributes; and

Paragraph 43 line 1-6, arrival and departure times are predicted (i.e. computed) based on the information received from the mobile carrier capacity attributes.

identifying one or more freight haulage job candidates from the set of mobile carrier entities based upon the computed projection of available carrier capacity and shipping attributes for each of a set of freight haulage jobs.

Paragraph 42 line 22-26, more than one current schedule (i.e. current route of a mobile carrier) is examined to determine if the freight request can be handled (i.e. identifying one or more freight haulage candidates based on whether the freight can be handled according to capacity and delivery requirements (i.e. based on computed projections of available carrier capacity and shipping attributes).

Regarding **Claim 2**, Gaspard discloses:

wherein computing the projection of available carrier capacity comprises estimating future positions of one or more of the mobile carrier entities.

Paragraph 43 line 1-2, the host computer computes projections of available capacity by predicting arrival and departure time at a location (i.e. estimating future positions) for a candidate mobile carrier.

Regarding **Claim 3**, Gaspard discloses:

wherein future positions of one or more of the mobile carrier entities are estimated at one or more times within pickup time windows specified for each of the freight haulage jobs.

Paragraph 49 line 14-16, arrival and departure times are estimated for a mobile carrier. The arrival and departure times comprise a pickup time window for each of the freight haulage jobs.

Paragraph 44 line 11-15, the estimation of pickup and delivery times (i.e. pickup window) is done several times during the movement of the vehicle to the destination.

Regarding **Claim 4**, Gaspard discloses:

wherein future positions of one or more of the mobile carrier entities are estimated based at least in part upon current transport condition information.

Paragraph 44 line 14-16, future positions (i.e. pickup and delivery stops) are estimated based on actual performance of the vehicle (i.e. transport condition information).

Regarding **Claim 5**, Gaspard discloses:

wherein the freight haulage job candidates are identified based at least in part upon the proximity of the estimated mobile carrier entity positions to pickup locations specified for each of the freight haulage jobs.

Paragraph 42 line 22-26, the determination of candidates is based on their ability to meet the transportation request, i.e. freight requirements including capacity and

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timing. The timing is determined by their proximity to pickup based on estimated routing information.

Regarding **Claim 6**, Gaspard discloses:

wherein the received excess capacity information includes amount of available capacity and mode of transport.

Paragraph 60 line 2-4, available capacity is determined by amount of freight space available in terms of volume and weight (i.e. available capacity).

Paragraph 34 line 3-6, various modes of transport (air, vehicle, marine) can be used in scheduling the excess capacity.

Regarding **Claim 8**, Gaspard discloses:

computing an amount of capacity available on a given mobile carrier entity based upon excess capacity information received from the given mobile carrier entity.

Paragraph 60 line 1-2, transportation freight requirements are evaluated (i.e. computed) against available capacity (volume and weight) to determine if the load can be carried by the mobile carrier in question.

Regarding **Claim 9**, Gaspard discloses:

wherein excess capacity information includes maximum volume information and maximum weight haulable by the given mobile carrier entity and

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volume information and weight for each item of freight being hauled by the given mobile carrier entity.

Paragraph 60 line 2-4, freight requirements of volume and weight for a freight transport request (i.e. excess capacity information) are received from the database to determine if a freight transport request can be fulfilled for a given mobile carrier entity.

Claims 10-14 and 16-17 recite similar limitations as those recited in **Claims 1-6, 8 and 9** above, and are therefore rejected under the same rationale.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 7, 15 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gaspard, II US 2002/0055818** (hereinafter **Gaspard**).

Regarding **Claim 7**, Gaspard teaches:

wherein the freight haulage job candidates are identified based at least in part upon a comparison of the received excess capacity information and an amount of needed capacity specified for each of the freight haulage jobs.

Paragraph 60 line 2-4, freight requirements of volume and weight for a freight transport request (i.e. excess capacity information) are received from the database to determine if a freight transport request can be fulfilled and how it can be fulfilled for a given mobile carrier entity.

Paragraph 43 line 1-6, arrival and departure time predictions are used to determine if a mobile carrier entity can be scheduled to handle the particular freight.

Gaspard does not teach:

wherein the freight haulage job candidates are identified based at least in part upon mode of transport specified for each of the freight haulage jobs.

Official Notice is taken that it is old and well known in the art of logistics to identify freight haulage job candidates based in part upon mode of transport specified for a freight haulage job. For example, if a mode of transport specified is by air, then the job candidate would be an airline and not a railroad. If mode of transport is specified by marine vessel, then a railroad freight haulage candidate would not be selected.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding selecting a freight haulage candidate based on their excess capacity and predicted arrival at a location, to include the step of identifying a freight haulage candidate based on mode of transport

specified for a freight haulage job, to ensure that the mode of transport requirement was met in providing transportation for the freight haulage job.

Claim 15 recites similar limitations as those recited in **Claim 7** above, and is therefore rejected under the same rationale.

Regarding **Claim 18**, Gaspard teaches:

A memory;

Paragraph 37 line 3, each terminal has memory.

A wireless transceiver;

Paragraph 37 line 6, any type of terminal can be used, including cellular telephones (i.e. wireless transceiver).

A positioner operable to compute position information;

Paragraph 38, GPS computes position information.

A controller coupled to the memory, the wireless transceiver, the positioner, and the scanner and operable to obtain from the scanner capacity attributes, including position information, route information and excess capacity information,

Figure 1 #140 and paragraph 35 line 1-5, the host computer is connected over the network (see paragraph 36, network can be wireless, e.g. cellular phones) to memory, the positioner and is operable to obtain the position, route and excess capacity information from a mobile carrier – see paragraph 38 line 2-6)

for a mobile carrier entity and to control wireless transmission of the capacity attributes through the wireless transceiver in accordance with a mobile wireless communication protocol.

Paragraph 37, the terminals (including wireless devices – see line 6) communicate over and network and thus transmit in accordance with a mobile wireless communication protocol.

Gaspard does not teach:

A scanner operable to direct a light beam at a symbol and to recover information embedded in the symbol based on detected reflections from the symbol.

The examiner takes official notice that bar code scanners which recover information from symbols based on detected reflections from the symbol are old and well known in the art of logistics as a way to quickly and accurately obtain information from a shipping package.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard regarding providing a system for scheduling capacity information on mobile carriers with excess capacity, to include the step of entering information into the system using a bar code scanner, because it would simplify and make more accurate the entering of logistic information into the system.

Regarding **Claim 19**, Gaspard teaches:

Wherein the positioner comprises a GPS receiver,

Figure 1 #170, GPS receiver – also see paragraph 38 line 3.

Claim 20 recites similar limitations as those recited in **Claim 9** above, and is therefore rejected under the same rationale.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

“Off the wire”, Aug 1998, Fleet Owner, Vol 93, Iss 8, p.TC5, ProQuest ID 33739571.

Leavitt, Wendy, “www.productivity.com”, Jan 2000, Fleet Owner, Iss 1, p.19, ProQuest ID 49011151.

“The National Transportation Exchange”, NTE.net web.archive.org webpages of Sept 2, 1999, Press Release of Sept 8, 1997. pp.1-3.

Raskob, John, “Managing the Supply Chain”, Mar/Apr 2000, Ivey Business Journal, Vol 64, Iss 4, p.52, ProQuest ID 68834588.

Business Wire, “CFI’s Surfside Announces Partnership with Qualcomm and other leading Infrastructure Providers”, July 24, 2000, New York, ProQuest ID 56782725.

Gumaer, Robert, "Beyond ERP and MRP II", Sept 1996, IIE Solutions, Vol 28, Iss 9, p.32, ProQuest ID 10136370.

"Warehouse Management Logistics", June 2000, Frontline Solutions, Vol 1, Iss 7, p.22, ProQuest ID 56151681.

"Carriers FAQ", NTE.net web.archive.org webpages of March 2, 2000, pp.1-6.

"The National Transportation Exchange", web.archive.org webpages of Sept 2, 1999, Press Release of September 11, 1998, pp.1-2.

Harvey, Joseph, "Better distribution through technology", Aug 2000, Beverage World, v119n1693, pp.54, Dialog 02059939 59210696.

Cox, John, "Working the wireless web", Apr 2000, Network World, v17n15, pp. 1, Dialog 02010872 52522401.

Harrington, Lisa H, "High tech trucking improves fleet performance", Oct 1999, Transportation and Distribution, v40n10, pp.53-62, Dialog 01913932 05-64924.

"ARINC", May 2000, Trucking Technology, v7, n2, p.19, Dialog 07623104 62919232.

"Rating/Routing Software: Make special deliveries routine", Nov 1996, Transportation and Distribution, p.60, Dialog 04653307 46845880.

Business Editors & Computer/Electronics Writers, "Qualcomm 3: Qualcomm announces agreement in principle to remarket IBM RoadRider OBC to OmniTRACS customers", Nov 1 1993, Orlando, Florida, Dialog 0366223.

"Runnin' on Data", April 1995, US Distribution Journal, p.22, Dialog 03829953.

Gormley, Mal, "Tracking the Fleet", July 1997, Business & Commercial Aviation, Vol 81, No. 1, p.90, Dialog 00867557.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS

JGS 7-26-2005

Susanna M. Diaz
SUSANNA M. DIAZ
PRIMARY EXAMINER
Art 3623